

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A print engine/controller chip configurable to be coupled with others to drive a multi-segment printhead comprising:

a memory buffer for receiving compressed page data;

image decoders to perform an expansion, in pipeline fashion, of the compressed page data;

a half-toner/compositer to composite respective strips of the decoded image planes;

and

a printhead interface to output the composite strip to a printhead,

the printhead interface including:

two LineSyncGen units, a first LineSyncGen unit providing a synchronization signal for multiple print engine/controller chips and a second LineSyncGen unit adapted to pulse a paper drive stepping motor.

2. (Original) The print engine/controller of claim 1 wherein:

each LineSyncGen unit produces an external signal to enable line synchronization, a generation in each LineSyncGen unit producing a pulse in a number of cycles until instructed to stop, the pulse defining a start of a next line.

3. (Original) The print engine/controller of claim 2 wherein:

number of cycles is determined by a register; each cycle being long enough to allow a line to print and another line to load.

4. (Currently amended) The print engine/controller of claim 1 further comprising:

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